INFORMANT: David Burris
INTERVIEWER: Steven Bucklin

DATE: 20 May 1999

SB: [The interviewer Steven Bucklin]
DB: [The informant David Burris]

[Beginning of side one, tape one] [Interview begins]

SB: This is Professor Steven J. Bucklin of the University of South Dakota Department of History. It is the 20th day of May 1999. I'm conducting an interview with David Burris, that's B as in bravo u-r-r-i-s. We are at the Hotel Alex Johnson in Rapid City, South Dakota. Uh, Dave I'm going to ask you just a couple of questions about yourself. Where are you from originally?

DB: From Iowa. Marshalltown, Iowa is where I'm originally from.

SB: We should have had Bob interview you, he's from Marshalltown as well.

DB: He is?

SB: Yes, he is.

DB: Don't feel bad, I've got four other people, three other people I know of in this town that all go to my same church, that were all born in the same town.

SB: Really?

DB: Yeah. [laughter.] That's weird.

SB: So when did you come to South Dakota?

DB: Uh, 76, 1976 I was transferred from Beal Air Force Base in California to here.

SB: To Ellsworth Air Force?

DB: To Ellsworth Air Force.

SB: And what was your uh, business then?

DB: I was, uh, in Quail missile systems.

SB: Uh-hmm.

DB: B-52 launched Quail missile drone system.

SB: Okay.

DB: And I was in that for about, I'd been in it for quite a few years, and I'd spent about two years and, openings for site manager came up. So I applied for it. And I was accepted about, about a year and a half after I got here.

SB: Uh-hmm. And by site manager that would be a facility manager?

DB: A facility manager, right.

SB: Okay. And I see as well that you were in electromechanical, or an electromechanical team trainer?

DB: Right. I was in, in electrical maintenance of missiles is what I've always been in. I was in Hound Dog before I became a Quail.

SB: Okay.

DB: And then that, when it was phased out, it was phasing that one out, so I went onto the Quail missile. And then even after I went into to become a site manager, they phased out the Quail missile, too. So really I had no other job, except being a site manager.

SB: And how long were you a site manager, from when to when?

DB: From the fall of '77 'til about the, let's see, 'til about '83, I think it was.

SB: And after 1983 your assignment was?

DB: They, they moved me back into Minuteman missile system. So I was still at the same base, just a different, different job.

SB: Uh-hmm. And you retired when?

DB: Retired, uh, two years later.

SB: In 1985?

DB: 1985, yeah, fall of '85.

SB: Okay. Um, would you describe your mission as a site manager for us?

DB: The mission of it was, more or less to, somebody always had to be in charge of the facility upstairs. The capsule crew was downstairs in the capsule and somebody had to maintain the building upstairs. We usually had, uh, six cops and one cook on site, besides the site manager. Uh, I was in charge of the whole facility. Uh, the cops were in charge of security, and the cook did the cooking.

SB: And by cops, that would be the security police?

DB: The security police.

SB: Uh-hmm.

DB: There were usually three on duty, each, every twelve hours. So that was their primary duty, or go out to the, the missile sites if an alarm went off.

SB: So there were eight people top-side generally?

DB: Generally.

SB: Uh-hmm. Describe, describe a typical facility for us, or tell us... Which facility were you located at?

DB: I was, I was assigned to, uh, Delta One. But being a new site manager, I, I was, being the young guy and new at this job, I got to float a little bit. So I, I floated to all the missile sites. In fact, at this time, all fifteen sites were under one control. So you could float to any of the fifteen sites. And once you were assigned as the NCOIC of a site, then you stayed at that site. But I was ...

SB: And NCOIC means "non" ....

DB: Non commissioned officer in charge. Usually each site had three NCOs, and it could, it could usually that, and the ranking NCO was the NCOIC. He always stayed at that site, but his two subordinates could rotate to other sites. So for the first year I rotated a lot. So I went to all sites, I think there were one or two sites I never worked at.

SB: Uh-hmm. I am going to stop and do an equipment check.

[equipment check]

SB: Can you describe for us a typical facility? Tell us about the building, the grounds?

DB: Uh, well I'll talk about, mostly about Delta, because that's the one I remember the best because I, I worked there.

SB: Good.

DB: I, I trained at a different site, but I was assigned to Delta. Delta was right next to the interstate, which made it a nice site to get to, easy to get to in the winter time especially, because if you've got a snow storm, usually if you went to Delta you got home. [Laughter.] Sometimes you got stuck for a double, double shift in the middle of wintertime because of a snowstorm. But, uh, usually, we usually, before we left the site, or left base, we had a briefing, all site managers were briefed that were going on duty. Uh, we would pick up all our supplies we needed for our three days. Then we'd usually pick up, go pick the, uh, cook and if they needed extra food or something we, we'd take it out at that time. Usually the food was delivered by a truck, usually once, once a week. But, uh, sometimes we needed extra food, and we'd take it out when we needed it. Uh, usually we got on site, we traveled with the capsule crew, they usually drove. The capsule crew and his, and his subordinate. And, uh, usually got on site and then I would check in with the site manager going off duty and we'd walk through the whole facility. Check every room, make sure everything was up and running and there was no problems. And if there was any problems he would relay them to me, what the status was, and then he would, he would leave with the crew coming off duty. Now the crew would change over every twenty four hours, but the site managers wouldn't change for three days. We stayed on, just like the cops, we stayed on three days.

SB: And then how long were you off after three days?

DB: Ah, after a three day tour, sometimes you'd have a three day, three days off, sometimes you'd have six days off.

SB: And during that time you would do what?

DB: Uh, usually once a month we might have a training day. But otherwise when we were off, we were off. It, it was fact, if we were fully manned, you know, and you had three site mangers at each site, it, it was pretty good duty. You know, you were three on, six off, most of the time. But usually you were training guys, and stuff like this. You were short handed or something like that. It went a couple years it was, it was really nice, because usually they tried to give you one nine day break a year. So, it was, it was pretty, if you had a family, I always considered it pretty good duty because I had my family where kids were not in school yet, and through the summer it was great. We would go up camping and fishing in the Hills all the time. So it was, we really enjoyed it. It was, it was, it's

hard for the wives because you're not around for three days to take care of anything. But she could call you on the phone anytime.

SB: Uh-hmm.

DB: So there was no problem there.

SB: When you came on site, did you go through an authentication process?

DB: Uh, we usually, we usually were, we were code equipped, but not as the capsule crew or the, the security cops, because they had to have access for downstairs and usually you didn't go downstairs too often.

SB: But when you came to the gate of the facility to change...

DB: They had a dispatch, they had a dispatch who would come, who was coming. So they knew when we reported to the gate who was, who was supposed to be there.

SB: Uh-hmm.

DB: And I would, we'd all come on site, the capsule crew was going down would have to authenticate with codes to get downstairs, and then the cops would, would change over up top side too.

SB: Uh-hmm.

DB: This particular facility is not like, is one of the older facilities, where the building is actually setting on the surface. The later models, the facility is under, is at ground level, it's underground.

SB: Uh-hmm.

DB: Even the facility itself. Delta is above ground like all the ones, because they were the first ones built.

SB: Uh-hmm.

DB: You go to, you go to Wyoming and then you'll just see, you'll see vents sticking out of the ground but you won't see no buildings or nothing, because everything's underground.

SB: Uh-hmm.

DB: So it's a little bit different. Uh, when I first got there, the buildings weren't built to last a long time. So winter time was, you could get cold.

[Laughter] They weren't well insulated. The building was not made, of course, they only made the system to last for about ten years, and they were using them a long time after that. So systems had to be updated and a lot of things ...

SB: How were they heated?

DB: They were, we had a, a, we used, uh, number two diesel fuel oil that run the generators, and it ran the furnace. We burned it for the furnace, an oil burner. But we had to, we had to maintain it, if we needed anything. If it went down, we had to try to restart it. You know, we had to be trained how to do this. We had to be trained how to do everything. Because you couldn't get somebody out from the base that quick. You could call it in and they'd probably show somebody up the next day or an emergency they might come out. But in the middle of wintertime, if you have a snowstorm, you were it. So you had to start the generator up, back it up, if you lost power. You had to work on the furnace to keep it running. It was a boiler type furnace.

SB: Uh-hmm.

DB: But it was fueled by diesel fuel.

SB: Was it air-conditioned for the summer?

DB: We had air conditioners that we put in the windows, and we'd take them out in the wintertime. So it wasn't, it wasn't too efficient at first. It finally, I think that, I don't know, later on, later years they finally put a regular air conditioner unit in the whole building, because it would it would get hot out there, well over a hundred out there in the summer time. Pretty warm. Guys who were off duty used to lay out in the sun and get a sun tan. [Laughter.]

SB: So how were the living quarters?

DB: Uh, it was a barracks style. We had, we had three guest rooms, because people, during code changes or maintenance crews that went past their time line, couldn't come back to base, so they'd have to RON.

SB: And that's a 'rest over night'?

DB: 'Rest over night.' Yeah, they'd have to rest over night at the facility, so you might after six, seven o'clock at night, you might get a team in.

Usually run from two to four guys and they would have to stay all the night. And you'd issue them blankets and stuff. And you'd have about three guest rooms and they'd just sleep over night, and buy their food. The

cook would fix their food and everything, so that it was no problem and they'd leave the next morning again after breakfast. Because they could go back to base then.

SB: How about the sleeping quarters for the regular crew?

DB: The regular crew was about, about the same as, as my facility, my room. Same size, although they had four beds per room and I only have one bed in my room. So I had a few more luxuries. Usually had a TV in my room too, so I could have some peace and quiet. The lounge area had a TV set too, but you know, you have a bunch of guys in there in an evening, it can get kind of noisy.

SB: Uh-hmm.

DB: But you did have some place you could go and hide from everybody else. [Laughter.]

SB: So you had a TV, um, in the lounge. What else did you have for recreational facilities?

DB: Uh, usually they had a pool table in the lounge. And usually out in the garage we might have a ping pong table and I think we had some other games out there. Not too many games. But you know, we had a few things.

SB: VCR?

DB: We never had VCRs, they didn't have VCRs when I was out there. We did have what they called a record player that would play movies. It was, it was like a big record.

SB: Uh-hmm.

DB: I forgot what they called them. But they were only popular for about two or three years then they went, finally come up with VCRs. We bought one. We operated our own Coke fund. The facility managers took charge of that. We had a Coke man come out and we'd have our own machine. So the profits we'd make off the Coke machine, we'd use this money to buy anything for the crew out there. So we'd buy, like when we did get a VCR, we paid for it ourselves. And at first, later on, they, they finally put cable in, and they finally put a disk in and stuff like this, you know, more entertainment for the guys. But up to that point, it was more or less, we had to buy our own stuff.

SB: Uh-hmm.

DB: And so, we sold, I'd buy candy bars and other stuff like this out of the fund and sell it to the guys for a little bit of profit. So then we'd just turn around and put it back in and we'd buy stuff with it, for the site out there. So you know, that way we generated a little, a little money so we could buy things we wanted. Once in awhile we'd have a barbecue. We had our own barbecue. And we'd send the cops, if they were out on a run, have them stop at Wall Drug at the grocery store pick up some, some chicken or something like that or some hamburgers. And we'd barbecue.

SB: Uh-hmm.

DB: Instead of eating the, the cold packs as they called them. We'd have, we'd do something different, you know, just to break up the monotony a little bit.

SB: Uh-hmm.

DB: So it, it got pretty nice out there really.

SB: How would you, you mentioned monotony, how would you characterize duty out there?

DB: Well, duty, my duties, I had things I did everyday. Usually I had to make my rounds. Mainly it was the water room, to check the water, make sure that the chlorine system was, was working properly. And I checked the water make sure it was getting purified and it was safe to drink. To check that out, you'd go through and you'd just make sure everything was operating normal. And uh, then I'd usually check on, see if the cook was, the cook was having any problems or the cops were having any problems. And so I was just more or less in charge and once in awhile, I mean the crew downstairs would, might have something not working right. They'd want me to check it out. I couldn't do too much, but I was in charge of the whole facility. If any time they had power fluxes upstairs or downstairs, they might call up and say "Well, turn the generator on, convert us over to generator power for awhile, we got problems with our main power system." So there was always something going on.

SB: Uh-hmm.

DB: So you were kept, plus guys were coming out and want gas. You were a gas station too. We had our own gas station out there, more or less. Had a big tank and you'd go out pump, have them pump gas.

SB: And the guys who came out and wanted gas would be maintenance?

DB: Maintenance crews and stuff, in the area and they needed some gas. You know, we had a big tank out there, I think it was a about five hundred gallon tank. And they'd come out and get gas, that way they wouldn't have to buy from the locals. But they usually had, it was a contract with the gas companies in the local area. So we had our own gas facility. That, that way we could, I had to have gas for my lawn mower to mow the grass in the summertime.

SB: Oh? You had to keep up the lawn? [Laughter.]

DB: Yeah. And in the wintertime I had to run the front-end loader. I had to plow snow. Do that in the wintertime, to keep everything cleared and open. So, you know, there was always something to do.

SB: Um-hmm.

DB: Plus we used, we used to paint and decorate. When I was out there we, we were, the cops, when I first got out there, the cops and the facility managers all rotated the same shift, so you always had the same cops out there. They kept the cops at the same site. So they didn't rotate to the other sites. So there was a, I liked it, it was a littler nicer then, because all the cops got to know each other real well, work together real well.

SB: No fights over what TV channel to watch?

DB: Plus, plus, you know, it was their site and they took a little pride in it. And uh, later on, when I first, when I finally left, they were rotating the cops all the time. And the cops didn't like it too much. But while I was out there, we used to, because you were out to your site all the time, you could, you could, what little money you had from the Coke machine, you could put it in to your site and you'd come back to your site and you got to use it. So it made it a little nicer. So we decorated things up a little bit. In fact, we called us, when out was out there, after a year out there, we called ourselves the 'Delta Dogs.'

SB: Uh-hmm.

DB: We put up, we had a big bull dog on the wall. And I think it got painted over after I left, and so they called us the Delta Dogs out there.

SB: Was that Domino's Pizza sign on the blast door?

DB: No, somebody did that after I left. The Domino Pizza, that was done after I left. Those guys, you know, you get a little whim, you know, and you've got to decorate things like that a little bit. They wouldn't say too much.

SB: It breaks the tension.

DB: It breaks the tension, and, you know, it's good, it was a good idea.

SB: Did they have the blast door decorated or painted in any other way?

DB: No, it was, it was just painted regular colors at that time. But you know, we used to, you could, we could just get the paint and do it ourselves, from the base and we could paint it. But they weren't the colors we were supposed to use, but if we wanted to spruce up things a little bit, they'd allow us do it.

SB: Uh-hmm.

DB: So you know, you got some, a little leeway in some things.

SB: So there was sort of an investment in, you know...

DB: Yeah, we took care of it, we decorated. My site we, we made some panels of stuff, and we put some movable panels up, like walls that we could move around, in the dining area. So to separate the dining area from the lounge area, and you could move it around, though, and we'd decorate. We had our own Christmas decorations.

SB: Uh-hmm.

DB: So we'd decorate for Christmas. In fact, one, my family came out, usually if you were on duty over Christmas, your family could come out for the day. So we'd get ...

SB: So your children go to see a launch control facility?

DB: Oh yeah, both my kids were out there one Christmas. I usually volunteered to work New Years and Thanksgiving so I could get off for Christmas. But one Christmas I had to work, so I had my wife and kids come out. So they spent Christmas out there with me. So it was, it's pretty nice.

SB: How was the food?

DB: Some of the food was good. It was just frozen foil packs. I don't know where they made them. I think they were shipped in, they were frozen foil packs. And all the cook had to do was throw them in the oven for a certain amount of time. Some were good, and some were, some were, you know, not too good. [Laughter.]

SB: Questionable?

DB: Everybody had their favorite. But generally I thought it was pretty good. I mean, I though it was better than, than Swanson TV dinner.

SB: Uh-hmm.

DB: Myself. But that's why we had hamburgers, sometimes we'd have steaks. We'd put a little money in and we'd all buy steaks. And sometimes the site manager would bring out his food for the whole three days, he wouldn't even eat what the cook fixed. He'd just bring his own food out and just use the kitchen facilities and fix his own. So some guys did that, so.

SB: How would, how was morale, then, among the top-side crew?

DB: Morale, when we were all together and rotating on the same site all the time, morale was really good. But after I was there five years, they started rotating the crews all out, to all different sites, and rotating the guards, the security police to different sites, morale went down. Because, because you know, and they, they didn't take care of the place as good. Because it's not my site. You know, I'm only going to be here for three days, I'll put up with what I can do. Everybody had duties, of what they're supposed to clean. The cops had to clean the, the latrine everyday, the cook had to clean the kitchen, you know, the tables. And they had to clean their rooms after every, make sure their rooms are straightened. They had to clean them up before crew change. So you get somebody that's not normally there, he didn't care too much about cleaning very well. But, uh, that was one thing about most of the facilities, they were spick and span.

SB: Did you conduct inspections?

DB: Uh, I, I was just in charge to make sure they did their job.

SB: Um hmm.

DB: And usually, most of the outside rooms, all the, the water treatment room, the diesel room, you know, most of the rooms that I only had access to, the floors were being buffed. They were painted floors and they were being waxed. And we used to walk on little pieces of carpet so everything was in inspection order, like a white glove.

SB: I'm sure.

DB: Everything was painted like new. So you, everything shined.

SB: Did you get, uh, general inspections? I.G [Inspector General]?

DB: Uh, we, we'd have I.G. inspections. Once or twice a year they'd come out and they'd check the different facilities and stuff. Plus, our own, my own boss, he would come out for inspections once in awhile. And then once a year you got, uh, you got evaluated on how well you did your duties and everything else. You know, you're tested on all your general knowledge, your helicopter, cause we had helicopters, we had to know how to check a helicopter would come in and take off, we'd had to be able to check it for, a ground check on it and check it for leaks and everything else. And so there was a lot of things you had to know.

SB: Now was your boss an officer? Or another enlisted man? Or?

DB: No. When I first became a site manager, it was all NCOs. There was one, there was a captain and a lieutenant in the office and there was something like forty or fifty facilities managers all under one head. Later on, they wanted, they split this up into three groups. The 66th, 67th, and 68th Squadrons.

SB: Squadrons, yeah.

DB: And they put you, they put certain, so many site managers under each one of the squadrons. Its, that gave the commanders of the officers, uh NCOs plus officers, and then they'd split it up a little bit. So it, you know, and that sort of, sort of hurt morale a little bit, too. 'Cause the NCOs all liked being together, you know, all together. and it sort of split everybody up into three groups. And then they competed once against the other more or less a little bit. So, then that stopped the floating around, too.

SB: Um hmm.

DB: 'Cause you just stayed in your squadron only. And you didn't float around so much. So ...

SB: Um hmm. Some people have told us some interesting stories about their experience with animals on site. Do you have any experience with the fauna of South Dakota?

DB: Well, uh, I've, we had a pet bull snake that was on our site for about three, four years. And, we knew it was there and it kept the, it kept the rattlesnakes off site. So, uh, and it would lay its eggs down near the radar receiver in the sand. But, uh, finally one young cop that was out there and didn't know about it and got scared and saw it and thought it was a rattlesnake and killed it. And it was about five or six feet long. It was huge.

SB: Um hmm.

DB: But I mean, it kept the rattlesnakes away! We knew it was around.

SB: And I suppose the mice were kept away too?

DB: Yea. No more mice around there or you'd have that problem. Uh, we didn't have too much trouble with actual rattlesnakes. When I was, the site that had the rattlesnakes was Alpha One.

SB: Where's that?

DB: That was farther up and farther north than Delta. About, oh about fifty, sixty miles. They built the site around the side of a hill and there was, it had a lot of rattlesnake dens. And, a guy, a friend of mine almost got bit by a rattlesnake in the garage and they had rattlesnakes up on the parking lot. [laughter] So I mean ...

SB: This was hazardous duty!

DB: It was a hazard. When you worked that site you kept your eye on your feet and where you were walking because every spring and summer you'd, you'd find at least, find at least one rattlesnake around.

SB: Did anyone ever get bit, bitten?

DB: Nobody that I ever know got bit. I know that people come close, but uh, that was the closest I ever seen anybody get bit by one. It used to, the cops used to run them, run them over on the road all the time.

SB: Um hmm.

DB: On the gravel roads. Because rattlesnakes were thick out there. The prairie rattlers. But uh ...

SB: How about antelope? Deer? Coyotes?

DB: Oh, we, we'd, you'd see 'em back and forth transfer, going back and forth to site. Uh, we had some guys hit a deer and brought it in site in the garage and cleaned it [laughter] in the garage. And the game warden came and got it.

SB: Um hmm.

DB: So, uh ...

SB: So there was no barbecued deer?

DB: No. No. The guys were hoping. The guys were hoping they could take it home but the, the game warden came and got it. [laughter] But, uh ...

SB: How about cattle?

DB: Cattle? We didn't have much, there was no cattle outside our fence, so we didn't have much trouble with cattle. Some sites had cattle up, right up to the fence and it might once in awhile cause trouble. But we didn't have any trouble at Delta because we were, the only thing we had around us was a little house that was right next there and the guy sold fresh eggs all the time. So once in awhile the guys that worked out there were, would walk up to the house and pick up some fresh eggs before they went home on duty changeover. [laughter] So that was about the only thing we had. We had, there was a lot of antelope around Delta. But last few years I don't think the, the herds have been kinda killed off. There's not that many anymore.

SB: So you mentioned the, the little farmhouse where the fellow sold eggs. How were your relations with South Dakotans in general?

DB: Uh, this, this, the guy that worked in the, he didn't mind having a site there at all. Other sites, guys were always having problems with the locals that, that lived around them.

SB: What kind of problems?

DB: Well, uh, usually the fence that runs around the perimeter is inside the property lines that the military established. And you're supposed to have a lot, I think it was ten to twenty feet of clearance, away from the fence. And, uh, some, some ranchers would plow, when they plowed their fields, would plow right up to the fence. Get as close to the fence as they could to plant their grain. Well, it's part of a security area, so you're supposed to have nothing growing outside the edge of the fence. So, you'd [laughs] you'd have trouble with a few of them.

SB: Would you have to go mow it down?

DB: They, they'd usually come out and mow it is what happens. They'd come out, if they grow wheat there, they'd come out and have to mow it. 'Cause you'd have to mow around the outside of it and you'd have to mow the whole area, keep it mowed down for part of the security and everything else. Once in awhile when you're mowing you'd run over a snake too! [laughter] Garter snakes mostly on my site. But that was, but every once in awhile you'd run into a bull snake once in awhile.

SB: You know, there were visitor, or sites designated for visitors, is that correct?

DB: Oh yea. Uh, when I first started out there, Delta was considered a, the training site and Delta Nine was the launch site that was designated training, so . . .

SB: The LF?

DB: Yea, the LF. So, we had a lot of people come out for training at Delta 1 and then they'd go out to Delta 9. Uh, Delta 9 was not too far from Bravo 1, so they usually, if they trained at Delta 9, lot of times they would go to Bravo 1 if they stayed over night because it was closer than Delta 1. But, uh, if a dignitary or anybody, congressman or anybody, come to Ellsworth, the quickest site to get to for a visit was Bravo 1. So you had generals, you had congressmen, you had everybody coming out to Bravo 1. But, uh, Delta, if they couldn't get into Bravo 1, they'd come to Delta 1. The reason that they liked Delta 1, most of the locals, it, when I first got out there, if a guy was on duty and he had relatives come to visit at the base, he'd get permission and they'd come out to Wall Drug, run through the Badlands, come around and hit Delta 1. They could make a circle.

SB: Um hmm.

DB: And so Delta 1 was ideal for that. So, a lot of times on Saturday and Sunday, I may get two or three tours. And the people'd come out and they'd take a tour of the outside rooms and the facility and then get to, some of the times, they'd get to go downstairs. But not all of the time. Mostly just the idea of seeing what it looks like upstairs.

SB: Now if they went downstairs, um, there's the problem of the "no lone zone," is that right?

DB: Yea. You had to be, if you want into the capsule, there had to be two people awake at all times.

SB: Um hmm.

DB: So, and ,uh, once in a while you'd go in the capsule just to check, a big thing the site managers check inside the capsule was underneath the capsule. The floor is suspended by four shocks and you used to go down and make sure that the sewer drain was working downstairs.

SB: Um hmm.

DB: Because if they had a exercise and they flipped a lever to isolate themselves and sometimes it wouldn't open back up again. And when they're isolated, the sewage just goes underneath the capsule and sets there. [laughter] And the valve doesn't work, you might have a mess to clean up underneath the capsule.

SB: Um hmm.

DB: A nice smelly mess.

SB: Tell us a little bit about the capsule.

DB: Uh, it was just more or less a floor that was suspended by four giant shock absorbers. It's hanging there in midair and this looks like a big egg. And, uh, there was usually the floor, under the floor was the batteries, the back-up batteries, and the generator. Later, later on, when I was in maintenance, we used to change out the generator or the batteries in the capsule floor. And that was a major job because those batteries were very heavy and they were huge.

SB: Um hmm.

DB: So was the generator. But, uh, then on top of, on top of the floor, you, the capsule crew had, usually there was two banks of, uh, computer equipment. And they had two stations: one for the commander and one for his deputy. And they had one bed, so only one could sleep at a time. If they wanted to take, needed a nap or something like that, one would monitor the panels and check it for any alarms going off at any of the LFs.

SB: Um hmm.

DB: So ...

SB: That would be Outer Zone or Inner Zone alarms?

DB: Yea.

SB: Um hmm.

DB: So, they would, one was always on duty. If, if I went down there in the night, usually I'd catch them in their pajamas! [laughter] Because they were by themselves. But when I was in there, they had to be armed. They were both armed while I was in there. But I would check to make sure everything was working properly. You know, usually I would just go down

and chat with them once in a while just to see how things were going and just get to know them a little bit. And they would, and once in a while too, after I was there for a year, I became a trainer. And, so, when I was a trainer, I'd bring new site manager out and he'd have three tours with me. And I would train him on everything. So, part of that training was, you had to take him downstairs. Also, I was trained to be able to break into the blast door.

SB: Um hmm.

DB: That was training that had to be. So, I had to train them how to get into, in case something happened, I could open the door from the outside.

SB: And what might that something be? Were there contingencies you ...

DB: Oh, if, if for say they had, back then, you didn't have too many transistors. It was mostly tubes. It was sealed tubes. And you'd get electrical fire. And the gas would asphyxiate 'em real quick. So, in case an alarm would go like that, I'd have to open the door and get 'em out of there.

SB: And how long would it take you to open that door?

DB: Fifteen to twenty minutes, I could open it.

SB: And that's a nine ton door, is that correct?

DB: Yea. That' a nine ton door. So [laughter] there was ways to open it from the outside. But there was also, if they didn't do things properly on the inside, I couldn't get it open.

SB: Um hmm.

DB: 'Cause of a procedure they could do to secure the door even from me getting in. But if it was properly sealed, I could open it from the outside.

SB: Um hmm.

DB: But it would take about twenty minutes.

SB: You know, I know that the capsule crewmen were screened psychologically and that others involved in the missile business were. Was that part of your training too? To be screened psychologically?

DB: Yea. Well, I always was in missile maintenance from the very beginning, so I had a top secret clearance from the time I was in the service all the way through. So, highly sensitive type stuff, so I was into most everything.

And there was things that, you had to be a good moral background to be there because you were dealing with very important stuff. You know, security stuff all the time. And, I guess, you might say that the cops were all supposed to have security clearances too, but, uh, you know, everybody needs watching. [laughs]

SB: I was just going to ask: were you trained to observe each other? I mean ...

DB: There were, there were, you'd run into personal problems, the, with the cook. 'Cause usually you were older than the cops, so you were like the father figure out there. Capsule crew, you know, they could talk to you on the phone, but they couldn't leave the capsule. So if something really happened, you're it. So you, once in a while, you'd run into emotional problems. Some kid, some young kid, you know, he'd get, he'd get, somebody'd call him and his girlfriend would be mad at him and he'd be emotional and stuff like that. And sometimes, you had to call the cop supervisor and have him relieved.

SB: Um hmm.

DB: And send him out. And sometimes you'd have problems with the cook. The cook would fly off the handle so you'd have to call in and get the cook relieved. Bring another cook out. And you might have an accident, too. You might have to, uh, we had a cook who was out there one time, well sprained her ankle real bad. We were playing volleyball outdoors and she couldn't even walk on it. So we had to call in a chopper and they had to haul her to base and they had to bring another cook out. So, and that happens too. Uh, as a site manager, usually once or twice a month, you might pull a stand-by for twenty-four hours. Your on, in other words, you're stand-by in case somebody gets sick or there's an accident or something happens in the family, the site manager has to leave site, that you have to go out and relieve him for twenty-four hours. And I've had to go out there on chopper real guick. We had one guy, they had to ferry his wife out on a plane, I think down to Denver, for emergency surgery or something. And so he had to, they had to get him off, so they choppered me out real guick and it's a quick trip out on the chopper and quick back!

SB: I'll bet!

DB: You know, get him back in real quick. It was an emergency. And that happens. So that was part of the job too. You'd pull stand-by once or twice a month.

SB: I'm kind of curious, too. Were you aware of any friendly rivalries or any tensions between, um, maintenance people and security police as an

example? Or between capsule crew and the people upstairs? Was there any?

DB: Oh, once in a while you had, you had, you had tension problems. You'd have the cops didn't get along with the cook too well. Or the cook, if the cook couldn't even cook foil packs very well, you know, you'd run into some problems there once in a while. The cook would, you know, didn't care. Or wasn't very neat. Or clean. Or something like that, you know.

SB: So how would they relieve those tensions?

DB: [laughs] Usually they'd, usually they'd, well, the good thing was only three days! [laughter] Sometimes you'd have problems out there, usually if it was anything serious, they'd relieve him. They'd send somebody out from base.

SB: You wouldn't find a bull snake underneath your, uh, pillow?

DB: No. No. The, about the only thing I remember ever doing, I think was somebody, oh the site managers used to play tricks on each other. Once in a while short sheet their bed. You know, you're supposed to make your bed and everything. They'd short sheet you. And usually, if I was training somebody new, you might set 'em up once in a while on some things, you know! [laughter] 'Cause usually it, usually it took about two tours before a guy was pretty well familiar with what he's doing and then usually the third tour, you'd let him do all the work and you'd just supervise him and let him do it all on his own. And then he'd become, then he'd be a, somebody come out. But if he was a supervisor, my boss would come out and evaluate him. Usually you'd have two guys. Usually you have a training NCO that was in charge of all the training, updated training, would come out with him and then they'd evaluate and take him through and they'd give him a test, written test. Plus they would have him do, like change power over procedure, receive a helicopter, check it out and let it, and then you know, let it go, and stuff like that. And then check somebody out the gate. You'd have to, if you were the only one there, no cops were there, you'd have to go to the gate to see who was there and check, verify their, their I.D. and make sure that they had authorization to be on site.

SB: You know, you mentioned earlier, um, the possibility of accidents and the sprained ankle of a cook. Did anybody die in the line of duty while you were in the missile business?

DB: No. Nobody [laughs], nobody died, thank goodness! We did have a first aid kit on site. So, and they did treat, train the site managers for a little first aid, you know, on splints and stuff like that. So we, you know, anything broken like that, or bad cuts. But nothing really too serious ever happened

when I was on site. Other guys had things happen, you know, so, but usually they never had any major accidents that I know about, about the five years I was out there.

SB: How did an alert affect you?

DB: Well they call alert and, oh, say an inspection or an exercise or something like that?

SB: Um hmm.

DB: Ah, usually when they have something like that, usually you end up with more people on site. They would, you know, I mean it would, you just mainly for me it was more visitors. More people on site and more things going on. And so it just made my job a lot busier. And usually what it would do is usually I was on duty actually for sixteen hours during the day and I was supposed to have an eight-hour rest period. You're supposed not to disturb me unless it's important, you know? So you like to have your, you like to get your sleep! But when you'd have some of these alerts go on or something go off, we didn't get much sleep! [laughter] So it, it gets, it'd make a long three days if you had a lot going on. Like during code changes. What happened to when they were changing the codes on all the missiles, so you would have all types of people on site. And you were really busy, they'd be busy for a good week or so out there. So you'd have lots of people on site. And then you'd have, you'd have warhead changes on sites and you might have to, you might have even warheads on site. You know, I've had, I've had a lot more people on site than I had beds to, for them to sleep at times. So that would get kind of hairy 'cause you have all these guards on site and they've got nuclear weapons on site. And [laughs] you end up with, you end up usually you had a deputy sheriff. Usually had a sheriff in case there was any local problems. And he was on the site too.

SB: Were there any local problems? Local demonstrations?

DB: Uh, they, uh, for a while they had a few demonstrations over on Echo Flight over by Kadoka. In that there was one LF that was right next to the interstate and had people protest it at one time because they didn't like, you know, nuclear weapons, against nuclear weapons. But that was about the only place they really demonstrated.

SB: Any, uh, um, penetrations ever of the LCF?

DB: No. I never, I never. They had exercises and you and people would try to and all this stuff, you know. Just games. But it actually, I never had anybody, I have, the only thing I ever had was people that's broke down

on the interstate that came up to the gate and needed help, you know, for their vehicle broke down and stuff like that and we'd get people out there. But you wouldn't let them on site.

SB: Was there a, a voice box or something? People come up to the gate, how do you know they're there?

DB: Well, this guy, the head security cop is setting right there on the windowed room and he can see the front gate.

SB: Okay.

DB: So anybody comes to the front gate, he can see 'em.

SB: Is that the FSC?

DB: FSC, yeah.

SB: Okay.

DB: He'd sit there. And he's always setting there and doing his job and watching the front gate. Now, if somebody wanted to come over the back fence, they could, but, uh, I never had anybody try to get over the fence.

SB: And if they did, what was the standard operating procedure?

DB: Well, they would, if the cops were on site, they would get jacked-up and handcuffed. They'd come and get 'em!

SB: Tell us what "jacked-up" means, would you?

DB: Oh, jacked-up means? They'd just, they'd just start spread-eagling them on the fence. And they'd usually would handcuff, well, they didn't have regular handcuffs. They had nylon ties. And they'd tie 'em and they'd call. Usually, the NCOIC of the Security Police, they usually had one supervisor that floated per squadron. And if anything major happened, these two guys were senior NCOs in the Security Police that always rotated to all five sites in your squadron. And they were always out there in case of any major security problems or anything come up that, uh, the head cop on site couldn't handle, they'd call them and they'd drive over. So, something like that happened, but, uh, we never had anybody try to come over the fence.

SB: But you had people get jacked-up on occasion? People within the Air Force?

DB: Uh, if, if you came in and, uh, you came to the gate and something was wrong with the codes, or your authorization was incorrectly, that you could, you could get jacked-up. In fact, I was supposed to go downstairs one time and I was, I got my codes, I had my codes backwards. And they realized what I was doing downstairs, that I had said it backwards. And they kept trying to indicate "Are you sure that's the way you want to say it?" You know? And all I had, and then I blew it, so they, so they had to send somebody out to relieve me. And I had to go back to base, re-verify all my codes, and come back out again. So it's a very embarrassing and you really, you do it one time and you usually don't do it again! [laughter] But they didn't, they didn't jack me up or nothing because they knew I'd just done it backwards. But, uh, I never saw 'em jack anybody up. But, uh, I heard of it happened at different times, you know. People that came out there or didn't have their codes right or something and that's, that was standard procedure. You didn't, you didn't play games.

SB: I want to ask you some questions outside of the, um, being a Facility Manager, I guess. You have an awful lot of experience with a variety of missiles in terms of maintenance and other things. Did you have a sense of, um, whether or not the Air Force missiles were superior to their Warsaw Pact counterparts or their Soviet counterparts? What did you think about the quality of the American missile? The Minuteman and the other missiles you were involved with?

DB: Well, most of the, I was in the Hound Dog missile system for about, let's see, for about twelve years.

SB: You want, what is a Hound Dog?

DB: Hound Dog is air launched missile from the B-52 that had one hanging under each wing. Uh, I was in that for about twelve years. It, it did its job. And it was very accurate. Our systems, I consider our systems a lot more accurate and more dependable than other systems.

SB: Um hmm.

DB: You know, our, our, I've seen the equipment from foreign countries and it's very shoddy. It's slapped together, you know? It works, but it doesn't, it is not reliable, you know? And usually, most times it probably won't even hit the target it was aimed for.

SB: Um hmm.

DB: And our systems always were usually very good.

SB: Did you ever get to witness a "bird in flight"? Uh, at Vandenberg or?

DB: No. I've watched 'em. I've watched, you know, tests. I've watched 'em come out and take a missile out of the ground and I've seen the tests of them actually taking it out and shoot it off and everything. But, uh ...

SB: You mean that you've seen a film of that?

DB: A film of it, of actually the shot and everything. But our systems always were very good, very dependable. And they always seemed to work right. Uh, the Minuteman out here was one of the first systems put in. And it has, it was a lot older, but everything worked and it was very reliable.

SB: Was it maintenance intensive?

DB: Uh, it was a lot preventive maintenance. Uh, there was inspections and inspections. And sometimes sites, um, on the Hound Dog missile, I think they inspected it to death. They overdid the inspections. They wore it out! You know? They actually, of course, it was not due to last very long, but they tested it and trained on it so much 'cause the Hound Dog missile, you could train on it without launching it. And you could train the systems on the ground, you could train the systems in flight, and there were a lot of hours on the system but it was never actually used. So you know, you wear it out that way. Playing with it. But that's the only way you're going to know it's going to work. And, you know, the same thing with any other thing, you have to keep checking it out to make sure it's going to work. When I was in the Quail Missile, that system, we always were testing it and putting it through its configuration, but they never, you know, they never used it. In fact, sometimes they, they were tempted to almost use it and got in trouble. So they stopped exercising it totally because they were, they run into some problems. Because the Quail, you have to, you can lower it below the B-52 out of the bomb bay. And you can start the engine up and run it without launching it. And they did that a couple of times and they couldn't get it back in. [laughter] You know, you couldn't get it to retract!. So, sometimes you run into problems there. You, they sort of pulled back a little bit, you know? But, uh, Minuteman, there's no way you could really, it was solid fuel, so there was no way you were gonna check it out unless you like did take it to Vandenberg. You know, to actually fire one to see if it worked, because it was solid fuel.

SB: And they did that on occasion?

DB: They did it on occasion.

SB: Randomly?

DB: They would go right out, come out and say "Okay, we're gonna, we're gonna take one of your missiles out of your silo, take it out to Vandenberg, put a dummy on it, and, and check it out. And most of 'em, I never heard of one of them that failed.

SB: Um hmm.

DB: The Minuteman was a very reliable system.

SB: I've got another question in terms of, uh, deactivation and I know you retired before deactivation took place, but how did you feel about the removal of the Minuteman I and IIs and the deactivation of the Missile Wing here?

DB: Well, this system out here at Ellsworth was, was one of the first systems. And it was only supposed to last for about ten years. And they extended that quite a few years past that ten. In fact, I think it was, it lasted about almost three times what it was originally planned for, which was a pretty good system, you know? But it was, it was like the capsule crew. That whole computer board, all those computers they had on that floor, nowadays you could put it in one desk, you know? It was, it was really outdated, but it worked. But the big problem was to get parts. Parts were hard to come by because the system's really old.

SB: Um hmm.

DB: So you're robbing from one system to the other. It was wearing out. They spent, they were spending a lot of money when I first quit, they were spending a lot of money rehabbing all the LFs and LCFs. They did a lot of work, spent a lot of money rehabbing to keep them longer. But then right after they did that, they ended up shutting everything down! So they decided to do away with it.

SB: Did you experience a sense of loss or, you know sort of nostalgia when they ordered the closures?

DB: Not really. It was an old system. If you look at the Minuteman system here at Ellsworth, prior to them building it, we had a lot of pictures, uh, at the site on the wall that showed 'em actually building a lot of the sites. Showing how they built it and how they dug 'em and everything else. There was a lot of ranches that never had electricity until Ellsworth came in and built these missiles.

SB: Um hmm.

DB: That the ranchers were out in the middle of nowhere, you know? They were isolated. But bringing the missiles in gave a lot of people jobs and it opened up electricity to a lot of these ranchers.

SB: Electricity, and did the Air Force build roads?

DB: Oh yea, they built a lot of roads. Well, they just improved a lot of the roads that were already there. They, a lot of the roads were just dirt roads and they graveled 'em and made 'em better because when you're pulling that, if you've ever seen the big missile trailer ...

SB: I have.

DB: That thing, you had to have a solid road. If it was a muddy road, it didn't roll. And, uh, I've rode in that thing before.

SB: Have you?

DB: Yea. And I've also been on convoy duty and rode in the truck out ...

[End of side one, tape one]

[Beginning of side two, tape one]

SB: Okay. We were talking about the convoys of the missiles, and whether or not the people on the highway knew what they were passing.

DB: They, most people probably guessed what it was. But there was never, there was never usually a war, it never had a warhead on it. It was just the missile itself. The warheads were in smaller trucks, and people probably didn't even know, they just thought those were maintenance trucks, probably. They didn't think nothing of it. About the only think you might know is if you see a, you know had a Federal Marshall, you know, along with it, in front with flashing lights. You might think "Well, there is something in that truck." But the main thing about the pulling the missile with that big unit, it didn't go up hills too well. Very slow, you could walk next to it going up a hill.

SB: Really.

DB: It was that, it was that big and that heavy. I've been out, I've been out on maintenance teams when they put a missile in or pull one out and that's, that's an operation.

SB: How long a process is that?

DB: Take a whole day.

SB: Really?

DB: Oh yeah, that missile, it takes, it takes hours, the pulleys for that missile, pulling that missile out of the ground.

SB: Uh-hmm.

DB: When that big unit goes up, stands erect, and then it has pulleys and cables that are slowly bringing the missile up and they just lay it over. And it's, it's quite an operation. I was on several of those.

SB: Um, Dave, I have another question I want to ask too. And that's, um, did you ever think about what these missiles actually did? Did you ever ponder, you know, will they be used? Is the Soviet threat real?

DB: Well, I never really thought they'd be used.

SB: Uh-hmm.

DB: But I think you always think about, you know, once in awhile you'd think about it, that if they fire at us, you know where the first targets are at. [Laughter.]

SB: And that would be?

DB: That would be us.

SB: You.

DB: Yeah, and I was sitting on top of the ground with the crews in the ground. And I always told them, I said, well, what would usually happen if you had an alert like that, all the cops there would be going down the tunnel.

SB: Uh-hmm.

DB: Go down in the elevator and get down in the tunnel by the blast door.

That's where we're supposed to, supposed to go in case of, you know something happened. You thought about it once in awhile, but, you know.

SB: Did you think you'd survive?

DB: I don't think you really cared if you survived. [laughs]

SB: And why, why is that?

DB: Because I think of maybe like the results of Japan and the nuclear war and the people that did survive, you know, what they went through. I think it would be better just be over with as quick as possible.

SB: Uh-hmm.

DB: But I don't think, really, you think about it for a split second, and that would be it, you know? It was just, it was a job. So you just, you just did it.

SB: Uh-hmm.

DB: You didn't think about it. You know, you figure anybody would be a fool to start something. [laughs]

DB: It's more a, I think it's more a threat right now today, than it was back then.

SB: And why is that?

DB: You knew who your, you knew who your enemy was. Today, there's too many, there's too many countries out there that are, got fanatics and there's too many nuclear weapons out there. And I think it is so unstable out there, that a nuclear bomb could drop anywhere, go off anywhere, anytime right now.

SB: So as a missile, uh, missile man, would you, uh, advocate an ABM system?

DB: Well, uh, you know, a regular defensive system?

SB: Um hmm. Anti-ballistic missiles.

DB: Yeah, well, it can't hurt. It can't hurt, but nothing's perfect.

SB: Uh-hmm

DB: You know, you know like you say, you can look over at World War II, all it did was take two nuclear bombs that were both small ones to devastate Japan.

SB: Much smaller.

DB: Yeah, much smaller than they are today. You, you know, you needed, you need some type of defense, but I don't think it would stop all of them. I think anybody'd be a fool to, if it happened, I don't think it would, it would pretty well be devastation for everything.

SB: So do you thing the Minuteman was designed to be used? Or was it designed to do something else?

DB: It was a deterrent, you know? It was, it was, if you do it, we'll do it. You know, and that's, that's, that was the only attitude.

SB: And of course, America's policy was no first strike.

DB: Right. Yup. If you fire at us, we'll fire at you. And I figure that's the way the other countries were too.

SB: Do you think that the motto of the 44<sup>th,</sup> sort of reflected that policy? Aggressor Beware.

DB: [Laughter.] Well if you shoot at us, we'll shoot back. That's about, that's about it and that was our job. You know, somebody sent missiles at us, we were supposed to start sending them back.

SB: Uh-hmm.

DB: And they were targeted, so, you know.

SB: When we go back to living on the, uh, top side, in the LCF. How were race relations among the crew, crew women?

DB: Uh, we did have, we did have female cooks.

SB: Uh-hmm.

DB: And usually the female cooks were the better cooks. [Laughter.] But, uh, we had some, we had some, some of our best cooks were guys though, too. But, uh, usually, you tried to, if you knew there was a good cook out there, you finagled to try to get that cook to your site. [Laughter.] Because the cooks rotated too.

SB: Uh-hmm.

DB: So you tried to get a good cook, because if you have a bad cook that would sort of hurt the morale of the whole group a little bit, you know? And if you had a cook that liked to do a little extra, you know that liked to barbecue or something like that, usually things went real well.

SB: Uh-hmm.

DB: Usually, when I first started out here, when we were all pretty well set at one site, the morale was pretty high.

SB: And, and no racial tensions? Or were there racial divisions?

DB: Uh, as far as, I don't, you might have some, but very little. I don't, you didn't really as much as you would probably as society.

SB: Uh-hmm.

DB: Because you all worked together and everything. Because we had site managers that were colored, and you know, different nationalities. And cooks were different and so were cops.

SB: Hey, what did you think about women in the Air Force, when they came to serve as crew members? I think I've got data that the first female Minuteman crew member was in October 1985. And that the first mixed gender missile crew was in August 1989.

DB: Yeah.

SB: What did you think about women coming in to the missile business?

DB: As far as the capsule, capsule crew downstairs?

SB: We can start with that. You bet.

DB: Yeah, it was rumored that they were going to do it. But, uh, you know, it was not good.

SB: Why not?

DB: Well, especially if you both were single. [Laughter.] Plus there was ...

SB: So there was some hanky-panky?

DB: Anything's possible, you know?

SB: Did it happen?

DB: Huh?

SB: Did it happen?

DB: Well, I don't know, you heard rumors.

SB: Uh-hmm.

DB: You know, that things happened. And you put, when you put a male and a female down there for twenty-four hours together and you've only got one bed. You know, it's not going to make much sense to put them together. So you know, you'd have to, and if both of them were married or each one was single, you know, it caused problems.

SB: Uh-hmm.

DB: I think, you know it never happened while I was out there. But it happened, it happened while I was still in maintenance.

SB: So would there be a solution to that, and that would be what?

DB: Well, if you had, if you had two women, or two men down there, I think, I think it'd been all right.

SB: Okay.

DB: When you're working that close together, you know, it's kind of an intimate type [laughs] like it wouldn't be good if you had two men down there that were strange either, you know?

SB: You mean gay?

DB: Yeah, gay. You know, that wouldn't be good either.

SB: What's your position on gays in the military, just out of curiosity?

DB: Oh, no place for them.

SB: No place for them?

DB: Uh-uh, because it'd cause too much, too many personnel problems. So, you know, that's all you hear about when you do find out one. It causes division, you know? And it causes problems. And you don't need problems when you're in the military.

SB: Uh-hmm.

DB: Your idea is, is one for all, and all for one. And you got an inter, intermixture of problems, you're gonna have more problems.

SB: Uh-hmm.

DB: Just like women in combat. I don't think women should be in combat either.

SB: Okay. Well, you were clear on that. [Laughter.]

DB: Because, you know, most men will try to take care of a female in a dangerous situation. It's just an instinct, you know? You're going to try to take care of her. And that could get your head blown off. [Laughter.] You know?

SB: Uh-hmm.

DB: You know? That's most guys instinct, if, if your wife or kids, if your wife was in trouble, you're going to have to protect her. That's the same thing that would happen out there. You're brought up that way. You tend to defend women. So it can get you in trouble sometimes.

SB: So did you, you had women serve top-side as well, right?

DB: Yeah.

SB: How'd that work out?

DB: Worked fine. As long as ...

SB: That didn't pose a problem, it was just the capsule?

DB: I had one cook that was a pretty good looking cook. And she was dating one of the cops. And, you know, you'd have to, no hanky-panky at the site.

SB: Was that allowed?

DB: No. But I mean, they, they could date on off duty. No problem there, but you know, nothing was to go on out at the site.

SB: Uh-hmm.

DB: You know, you kept, you did your job and you stayed in the group. No going off to bedrooms or anything like that, you know, by yourself. You know, you kept an eye on them.

SB: Okav.

DB: So there was nothing, none of that happened out there that I know of.

SB: Okay.

DB: Cops that did date cooks and stuff. We did have quite a few female cooks out there for awhile.

SB: I'm going to go back to the capsule for just a minute. Um, they had escape tubes.

DB: Yeah.

SB: Tell us a little bit about those escape tubes.

DB: I hope they didn't ever have to use them. [Laughter.]

SB: And for what, beside from the obvious reason?

DB: Well, they usually had a wrench to open it, but it was, they probably told you, it was filled with sand. Okay, what happens when you get hit with a nuclear bomb, you get a lot of heat. And what does sand turn into?

SB: Glass.

DB: Glass. And they didn't give any shovels. They didn't give a pick or an ax. All they had was a wrench to take the lid off. I mean, it was a joke. We used, we used to kid them about it. I says, I says "You got as good a chance as just trying to go through this concrete with your fingernails as trying to get out of here."

SB: So do you think the reason they put it in was psychological? To...

DB: I think, it may have been a good idea at the start, but I think, as far as your chances of ever getting out of it, aah. [Laughter.] Very, very slim.

SB: Okay.

DB: I don't think you'd ever, I don't think you'd ever, you'd ever crawl, crawl out of it. I don't think it was, we always thought it was a joke.

SB: Do you know if the crew, the capsule crew had any, um, standing orders, what they were supposed to do if they got out of the tube? Where were they supposed to go? Or?

DB: I don't think they ever had a plan on that. [laughter] At that point, I don't think, I don't think they'd really want to go up top-side if they were hit with nuclear weapons, you know? Fall out and everything else, you wouldn't want to go out there. You know?

- SB: How long could they survive in that capsule?
- DB: Um, really, for what food they took down with them, they uh, they only had enough electrical power, probably, to last them two or three days on the batteries. Unless the generator upstairs was running and switched over.
- SB: Survived the, uh, blast?
- DB: Yeah, and survive the initial blast, and was still running. You know, all the electricity to the, to the LCF was cut off. That generator could run for oh, for weeks.
- SB: Now you mentioned that you and the top-side crew would come downstairs in the event of an attack. Did you have, did you expect that you would be able to go back upstairs eventually?
- DB: [Laughter.] Well, you know, it'd depend on if something hit close to you, you know? That's the only thing, you could probably go back up.
- SB: And did you have a standard operating procedure?
- DB: We had, we had emergency, we had emergency Geiger counters and emergency rations that were in the tunnel shaft.
- SB: Uh-hmm. And where were you supposed to go then after it was okay to leave the uh...
- DB: It would depend on if you had communications with anybody.
- SB: Um-hum. But there was no general order to say you were supposed to return to Ellsworth. Or you were supposed to....
- DB: You were, more or less, probably supposed to return to Ellsworth. You'd go back to your duty station if, and you would probably, since you had three different kinds of communication in the capsule, they, they could communicate with SAC headquarters or they could communicate. communication was still working, they'd would probably tell you what to do.
- SB: Uh-hmm.
- DB: You know, you'd probably wait until you'd heard something.
- SB: But again, this is probably.
- DB: Yeah.

SB: So you're not aware of any...

DB: No.

SB: Okay. Uh, let me see here. Can you describe to me your most humorous missile field experience?

DB: My most humorous?

SB: Um-hmm

DB: Gee, we used to have quite of few humorous things out there, but I'm just trying to think of anything that was real, real humorous. Uh, you know, we, we, like I said, we used pull security exercises on site. And usually the cops had a security exercise and usually the site manager was always volunteered to be bad guy. And you know, you were, you were, the security police, the supervisor would come around and may stay on your side and say "Okay, I'm going to pull an exercise." And several times they had me hide bombs on site. You know? And I always give them a bad time, because nobody could ever find my bombs. And plus I would play games with them. I one time, they had, they were supposed to have a terrorist on site, and I had him in the bucket of the front end loader and had it, I had him up on the parking lot up real high, so they couldn't find him, in the front end loader. And they all came out and they gave up. They couldn't find where he was at, couldn't figure out what was going on. And then he, he mowed them down from the top of the front-end loader. [Laughter.] You know, things like that. We used to pull little tricks and stuff like that on them. You know, I used, I used to get in to it. We used to always play their games.

SB: Uh-hum.

DB: And they'd, we'd have terrorists attack the front gate and stuff like that, you know. And play games.

SB: Uh-hum.

DB: Just, just, you know, just for fun of it once in awhile. And they used to, you know, pull off that stuff once in a while, you know, and see what they would do.

SB: Um hmm.

DB: You know, really, you're doing, you weren't too well protected in that building. It was all wood. Somebody can come up to the front gate and just open up with a rifle and wipe out the whole crew.

SB: What kind of weapons did you have on site?

DB: I didn't have any weapons, but they had this M-16s and ...

SB: Each of the security police?

DB: Each of the security police had M-16s.

SB: So there would be six M-16s on site?

DB: Yea.

SB: Um hmm.

DB: And that was really it.

SB: And then the two side arms of the capsule crew and that's it?

DB: Yea. They had side arms. That was it. And I had nothing. [laughs] You know, I'm the one that's supposed to be in charge of this place and everybody's got guns but me!

SB: So, M-16s and nothing else.

DB: Nothing else. Uh, the two supervisors that were patrolling out, they had M-16s also. Uh, also in the field usually, if anything major was going on, usually you had a chopper full of security police. And they had an M-60.

SB: Um hmm.

DB: Machine gun.

SB: Um hmm.

DB: And they were usually in choppers. And they were flying around. They'd run escort, air escort. And you usually have extra cops on the ground. But, uh, later on, when I was there, that's when they got the new, uh, the new trucks and those armored vehicles they got.

SB: Um hmm.

DB: And I remember they got those. That was another joke. [laughter]

SB: Why's that?

DB: Well, when they, I guess General Motors, I thought General Motors, but Chrysler Motors got the contract for them and built those armored vehicles. They put this big armored cage on top of this, I think it was a three-quarter ton frame, and it was too much weight on the frame. And they first got 'em and they couldn't drive 'em fast 'cause the tires would go bad. They were bullet-proof tires.

SB: Um hmm.

DB: And in the summer time when it's a hundred degrees out there and you get in this piece of metal tank, if you, you closed it all up, you'd sweat to death! [laughter] And, you know, and it would only protect you against small arms fire is all that the good it was, you know. And it had a tripod on it for the M-60 and all this stuff on it. And it was, we'd always call it a rolling coffin is all it was. [laughter]

SB: And it didn't inspire faith?

DB: It was better than a truck. It was better than a pick-up truck. But it wasn't much better. And when they first got 'em they had all kinds of trouble. They'd overheat, uh, they had trouble with the tires falling apart. They were filled with a fiberglass inside the tires so they wouldn't deflate if they got shot with a bullet and stuff and ...

SB: How was equipment in general? I mean, did you have the equipment you needed? Were there shortages?

DB: Usually we had, we had to just, a had mostly were just pick up trucks. And usually they were kept pretty new. And once they hit over one hundred thousand miles. We had a roving mechanic that used to be out there and if you had a truck that needed maintenance or something like that. And he would, he would take care of my front end loader and check it in case I had any maintenance problems on it. 'Cause I used to, used to every tour you'd start it up and check it, make sure it worked, you know. Start, you'd check the antifreeze on it and if the crews had any trouble with the vehicle, you had a mechanic, floating mechanic out there who'd come and fix it. So, equipment was usually kept up pretty well.

SB: Personnel shortages ever a problem?

DB: Yea, we had, we got short of site managers and cops. You'd always getting short of people. And then you'd work three on and three off, three on and three off, a lot of that. And you may be lucky to get one six day break a month.

SB: Um.

DB: So at times you got pretty short of people. But, uh, it only happened a couple times, you know, while I was out there. But, uh, I heard it got worse at times and sometimes it got better, so it was off and on. It was just normal depreciation of people.

SB: So were there any legends attached to any of these facilities? Any stories about UFOs? Or ghosts? Or?

DB: No. I've, there was, uh, there was different sites had different problems. Uh, Echo had the worst water of any site. No, it was Charlie had the worst one. The water had so much lime in it, it was actually warm. It had lime in it and if you washed your vehicle with it, it had white dust spots all over it 'cause it would just scale. It would have so much lime and stuff in the water, you'd need, people at that site didn't even drink the water! [laughter] 'Cause I think it was close to Philip and it had a lot of thermal water, warm water in the ground. And so it was, it was not a good site to be at. You'd wash off the black top and it'd have white spots all over it, the water was so bad.

SB: Um hm.

DB: Some, we had real good water at Delta. We had one of the deepest wells. And we had, so we had real good water all the time I was there. Never had any trouble with the water.

SB: Now did you have, um, water, like a back up supply of water in case your well went out? Or?

DB: Uh, usually what happened is once every three days the well, the pump would kick on. And we had a big reserve tank in the ground and it would fill it up. And it would last, that tank would last about three days if you just had a normal crew out there. But if you used a lot of water, then the pump would keep kicking on. But nobody I'd ever known had any problems with actually the well quitting on them or not. So, you really had no real problem with that 'cause, you know, we kept up, we kept the equipment up. And we were always checking it. You know, everyday we checked the water. We checked the system out and make sure it was working. So everything was pretty well kept up. And usually if you had a problem you could get somebody out the next day to fix it. And, it being that Delta was on the interstate, even if we had bad weather in the wintertime, Delta was one site you could get to.

SB: Um hmm.

DB: You could always go home from Delta.

SB: Um hmm.

DB: 'Cause you're on the interstate! So, if you were like up at Alpha, you were all mostly gravel roads. And if you got a blizzard come in, you get be stuck up there for, some guys I've heard 'em be stuck up on a site for a week.

SB: Really?

DB: And they had to chopper in food to 'em.

SB: Wow.

DB: So, you know, some times in the wintertime, you didn't like it out there too well. And when I first got out there, the sites were not too well insulated. In fact, they had no insulation in the walls. And I've seen, and you couldn't even get, you could hardly get the room above freezing. The heating system would just run and run and run, because everything was, 'cause it was sit, it was first, when it was first built, it was temporary. So it wasn't built too good. The windows didn't fit real good. When, one of the first things they did while I was out there, they replaced all the window and put double pane windows in.

SB: How was your winter issue clothing? Your winter issue gear?

DB: Oh, we got, we got good winter parkas and stuff like that. And snow pants and bunny boots and like that. But you didn't want to wear 'em all the time! [laughter] Yea, I know some nights when I first, the first winter I spent out there, you, you put two or three blankets on you to try to keep warm. And you hoped that the wind was on the other side of the building. Not on your side 'cause all the heat would go to the downwind side.

SB: Ever cause a problem with pipes freezing? Or ...

DB: Uh, well they first come in and they finally they were going to put a subceiling down in the floor. The pipes, instead of being in the ground, were, were up in the attic. And they come in and they insulated the ceilings. Well, they didn't insulate the pipes. So the first site they did it to, they blew all the pipes up and they had to redo it. And they finally got smart and they insulated the attics first before they come in and put the sub-ceilings in it. And they refitted it. Later on they put steel siding and reinsulated the outsides of the buildings and ...

SB: So it got more comfortable?

DB: It, it got, it got better. After the five years I was there, actually it was getting pretty comfortable 'cause they, when you put new siding on, new windows, you were insulated and stuff like that, it got pretty comfortable.

SB: So what would you say was your greatest challenge?

DB: [laughs] Training site managers. 'Cause sometimes, I had a couple site managers I didn't think were going to make it. [laughter] And they're, they're pretty well screened before you're allowed to come into the field anyway. And, uh, I had one guy, in fact, I, he was a site manager for about twelve years I think after I finally, I didn't think he was ever going to make it! [laughter] Some guys you didn't think were going to make it. And sometimes they, you know, they didn't, they worked out pretty good afterwards. And sometimes some guys didn't. But, uh, Dave Blackhurst, I trained him.

SB: Um hmm.

DB: And, uh, but he, and he was a rifted officer.

SB: And Dave Blackhurst was another Facility Manager and a riffed officer?

DB: Yea. He was a captain and didn't make, didn't make, you know, didn't make his next rank. And that happened quite a bit in the Air Force. And they give him a choice: either you get out or become an NCO. So, and Dave always told me his best years is when he was ...

SB: an NCO?

DB: An NCO. [laughter]

SB: Dave, did you have any, you know you served both with an air crew, an aircraft crew, and as a missileer. Was there a sense of second class citizenship? Or, you know, did more glory go to the aircraft crew than to the missileers?

DB: Uh, when I was in, when I was in, uh, Hound Dog, usually you, because they went on missions all the time with the missile and exercised and used them, you know, for tests and stuff like that, it got at first, uh, they didn't send anybody along on the plane. So it got so they used to send an NCO with them on the plane to keep them from messing up! [laughter] Or to fix whatever they might break in flight, you know? They're trained to use it and, you know, operate, you know actually operate it and fire it. But you do all the maintenance on it. So you're more familiar with the system actually than they are. They're trained how to operate it and to fire it. They're not trained to fix it. So, you know, it got, you got fed up a little bit.

Sometimes they'd break stuff and you got to fix it because they'd break it because they didn't understand how, how to operate, you know? So sometimes you got a little frustrated. But usually, you got along pretty good. Being a site manager, I got along real well with the officers.

SB: Um hmm.

DB: You know, we were pretty close, you know. I think most officers, if they were young and smart, they, they knew where their bread and butter was. It's on the NCOs. And if you treat the NCOs right, they'll, the NCOs will take care of the officers.

SB: Take care of the officers.

DB: And, if they understood that, things went along pretty good.

SB: But now, back to that question about a difference between the aircraft and the missiles, I mean was there a sense that you were somehow not treated the same way as the aircraft crews were? That you were second class in the missiles rather than first class?

DB: Well, they still, the military, they don't like officers associating with NCOs.

SB: No, I'm not talking about the officer/NCO thing. I'm just talking about the air, um, there's been. Some of these subjects have suggested to me that the people that were assigned to missile duty didn't get promoted as quickly as people assigned to air craft duty. And, uh, that they had a sense that maybe they were somehow second class. Did you have that sense?

DB: Yeah. If you were a missile, if you were on missile crew it means you couldn't make it anyplace else in the military, in the Air Force. And ...

SB: Why was that?

DB: Because, I even, I even applied for being an officer, for direct commission. And even their attitude was if you can't be a navigator, a pilot, if you couldn't get anything else, you could always be a missile crew.

SB: Ah.

DB: And that was the Air Force's attitude. You know, it was, and I don't think it was that bad a job, really. You know, I knew one guy that worked for me when I was in the Quail Missile system, he was just a three striper, and he become, he became an officer and he ended up back out on a crew.

SB: And a three striper is an NCO?

DB: It was an NCO. And he ended up becoming a second lieutenant at, out here at Ellsworth and being in a capsule crew.

SB: Huh.

DB: I met him years later when I was in maintenance, after I was a site manager, I met him then. He worked for me at Ellsworth in Quail Missile. With my team shoes. He became an officer and capsule crew. But, uh, yeah, it was considered if you couldn't do anything else, you could always, you could always be a missile crew.

SB: Be in missiles.

DB: Because there was really no glory and I guess when you're in the Air Force, if you fly, the only thing you can do is fly.

SB: Um hmm.

DB: And if you're in Minuteman you're second class 'cause your missiles never fly. [laughter] You know, you just set in a hole.

SB: I've got just a couple concluding questions. Um, what was your most significant accomplishment?

DB: Um, you mean as a site manager?

SB: We can do that! As a site manager. As a member of the 44<sup>th</sup>. Uh, what do you see as your most important accomplishments?

DB: Well, I, my accomplishment was I trained an awful lot of site managers while I was out there. And ...

SB: One of whom you didn't think was going to make it!

DB: Yea, one I didn't think would make it, but he ended up being a site manager longer than any other site manager I knew out there.

SB: Hmm!

DB: In fact, I think he still lives, I think he works at Harley Davidson here in town. I'm trying to think of his name but I can't think of it now. But, uh, uh, our, Delta One was, while I was out there, was won more awards than any site out there. In fact, before we became squadrons we were separated, we were usually the best, the best site. And we, you know, and that's one

of the things while I was out there, we were considered the sharpest, one of the sharpest sites out there.

SB: Um hmm.

DB: And we, you know, and it was a training site. And it was a visitor's site. And we were, besides Bravo One, you know, we were seeing public as much if not more than any other site out there, you know. Even though Kilo One was the head site of all the LCFs, because it was way out by Belle Fourche, I mean it was a long way out there, everybody came to Bravo One or Delta One.

SB: Um hmm.

DB: So, you know, we were, we were, if you wanted to see a site, that's usually where you ended up. So, we were just, we were just a good site and we were popular. Had a lot of civilians come out until they finally stopped it. We had a lot of civilians. A lot of people from Wall, you know. Did they tell you about getting donuts at Wall Drug?

SB: Yes. [laughter] But we'd like to hear it again.

DB: I tell you. We knew most all the older women that worked in there, especially around the winter, you know, that worked year round. You usually knew 'em by name and they knew us. And really got along well with the people in Wall. Especially in Wall Drug.

SB: Um hmm.

DB: But, and then you'd get to know a lot of college kids would come out in the summer time and would, you know, work for four years, you know. And you got to know a lot of college kids.

SB: At Wall Drug?

DB: At Wall Drug. Yeah. So you got, and we had our bank account at the bank in Wall Drug for our little Coke fund and everything out there. So, and the people of Wall took real good care of the missile people. They really liked them and they appreciated them and they took care of them.

SB: And that was, it was Hustead's policy to ...

DB: You'd get a free donut and coffee.

SB: Um hmm.

DB: And that went on, and that went on to everybody and it worked well. Good relationship between Wall Drug and the base and everything.

SB: I want to ask you what you think about the whole idea of preserving Delta One and Delta Nine as a historic site, as a national park?

DB: Well, a lot of people, and I really, until I become a site manager, didn't know too much about any of it, you know? People hear a little bit about it, but don't even know it was there, you know? And so it's something that went on for quite a few years and nobody knew it was actually there. And, so, a lot of people that'd come out and say, you know, "This is where the capsule crew lives" and all this stuff, you know? They were thinking that the missiles were right there at the LCF, you know? You were going to launch them right there. They didn't think they were out, how it works and everything else. Lot of people were surprised because they didn't understand what was going on. And, uh, you know, it's something that lasted for quite a while. For the Cold War, it was one of the first squadrons built and it was around for a long time. They had the Titan, was out there for a while, but before it even got up and going, they cancelled it because it wasn't efficient. So, this was a system that worked and they kept it going for a long time. Lot longer than they figured on. I figure they got their money's worth! [laughter]

SB: So you, you think this is a good idea? To preserve these two sites?

DB: Oh yeah, yeah. 'Cause a lot of people went through Minuteman, you know, through about thirty years there. And even though they still got the Minuteman III, is still operational, you know, it was an old system. But it was one of the first and it was around for a lot of years and people didn't even, they went by a lot of LCFs and a lot of LFs and didn't even know what they were.

SB: Did you go out when they deactivated, did you go out and see any of the deactivation?

DB: No.

SB: Okay.

DB: No, I knew, uh, I knew a lot of ex-military guys that were working on the renovation and tearing down and removing stuff.

SB: Um hmm.

DB: You know, when they finally started doing it.

SB: So when it becomes a national park, will you go out and visit?

DB: Oh, I'll, I'd go out there, to Delta One. Just to, you know, 'cause it's where I used to work.

SB: Sure.

DB: You know?

SB: Another question: would you support, should the United States help the Russians develop a similar national park? Something for the Russian people to see?

DB: Well, on the same aspect a lot of the Russian people didn't know what the Russians even had.

SB: Um hmm.

DB: You know? You know, it was part of history. You know, during the Cold War, they didn't even, they probably, most people I think were more ignorant in Russia than they were here. You know, because they don't have the communications and stuff that we used to have, so they probably didn't even they had, most people probably didn't even know they had 'em.

SB: Um hmm.

DB: You know? Or didn't know what capabilities they did have, you know, except for the leaders. 'Cause here in the states, everybody knows what's going on, but it, over there, only the leaders knew what was going on.

SB: Um hmm.

DB: So, you know, it would be interesting, you know, for the people to now what's going on. Part of the, it's part of the Cold War. You know, it's time to start to preserve history a little bit. You know, what went on.

SB: Well, then my last question, Dave, is: can you think of a question I haven't asked you that I should? Or is there anything else you want to talk about?

DB: I'll probably think of things after I leave! [laughter]

SB: And so will I!

DB: I should have asked, said this, or I might have forgotten some things. You know, it, I did it for five years. And I trained a lot of site managers. And it

was a, it was the best job, I can say it was the best job I ever had in the Air Force. I really enjoyed it. Of course, I liked it, I like to be on my own, you know? And it was, was my responsibility and I enjoyed it. And we did a lot of things. And we accomplished a lot. But, uh, I liked training one-on-one, so I did that all the time I was out there. So it was, it was a good deal. I wished I would, they would have left me there. But they decided that I needed a change, you know? [laughs] It really wasn't a good change, but, uh, I did it. But I wish they'd left me. I know other, other guys that spent a lot longer out there than I did. In fact, I was just thinking of another guy, too. The guy that trained me. He was a site manager. Went back into tanker maintenance. Was a crew chief. Came back as a site manager. Then he went back into some other field for a while. And he came back as a site manager and retired.

SB: Yea.

DB: Yea. That was Greg Mower. And he, in fact, he's in my church too.

SB: Um hmm.

DB: Greg trained me and I've known him ever since I've been here.

SB: And then you trained Dave Blackhurst.

DB: I trained Dave and a lot of other site managers. And there was quite a few of 'em that are still in the area here, but I don't see many of 'em. Forget about most of 'em. Once in a while, I run into one of them. But, uh, most of 'em moved away. Most of 'em end up going other places.

SB: Why did you choose to stay in South Dakota, just out of curiosity?

DB:: Why did I choose to? Well, I came here in '76 and I just stayed here for twelve years.

SB: Um hmm.

DB: So, you know. And I've been in this area before, you know. Being raised in lowa, I knew the Black Hills, And I knew the area. So I bought a house when I moved here.

SB: Um hmm.

DB: So, I figured there was no reason, there's no reason to leave. 'Cause I'd seen, I'd seen California, I'd seen Michigan, I'd seen Illinois. And I'd seen other places and I didn't like it any better. [laughter] So I figured this is, this is a good place to stay, raise a family.

SB: Well, Sergeant Burris, I want to thank you for sharing your experiences, your memories, um, and for participating in the project.

DB: Okay.

SB: Okay. Thanks a lot!

DB: Yeah.

[end of interview]